
Methodology of Building up the Accounting and Analytical Management Support for Organizations in Russia

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Abstracts:

This article deals with the issues, concerning methods of providing accounting and analytical support for the management of organizations with various patterns of ownership in Russia, related to national mentality and caused by the lack of uniform terminology, the need for a systematic approach to the formation and interaction of accounting, analytical and control subsystems, the influence of international practices in the context of harmonization of world economy. The ways of solving the problems have been identified. The original classification of the principles of the accounting and analytical support buildup for the organization management has been compiled. We have analyzed the existing approaches and individual points of view to determine the content of this concept, and put forward our individual interpretation. The authors explain the purpose of the effective functioning of the accounting and analytical support of management and offer a system of fundamental principles of its organization. The main advantage of the authors' interpretation of accounting and analytical support is in the improvement of general methodology as well as creating the ground for developing techniques of record keeping, analysis and control on the basis of international experience, which ensures the continuity of the process of tactical and strategic decision making, well-timed adjustments of the development strategy of the organization in the long term, contributing to the efficiency of administrative decisions taken by the management.

Key Words: Accounting, accounting and analytical system, accounting subsystem; analytical and control subsystems, accounting methodology, accounting information, analytical information, harmonization of the global economy.

JEL Classification Codes: M10, M40, M41, M42

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1. Introduction

For effective development of entrepreneurship in Russia, it is vital to have a system of accounting and analytical support, adequate to the existing market relations and allowing making rational management decisions. Abroad there has appeared a business area related to the collection, processing and analysis of financial information which is called accounting and associated with auditing. Within this system the accounting and analytical management support (hereinafter AAMS) is organized. Current AAMS does not provide the appropriate quality and reliability, is not able to use the advanced techniques of modern accounting to the full extent and requires further improvement. In Russia AAMS is organized on the basis of methodology and techniques of the whole complex of economic disciplines, including accounting, analysis, audit, planning etc. Changing economic environment of business entities, the expansion of relations with the subjects of the global market, the appearance of new entities for accounting, analysis and audit, new business activities and the legal framework changes necessitated the search for new methodological approaches and techniques within the accounting and analytical systems of business entities in order to create relevant information. The need to address the issues of the AAMS methodology for the economic entities in the context of harmonization of the global economy determined the relevance of the chosen topic.

In the study, two fundamental problems of methodology of AAMS developments for organizations have been identified and are related to: 1) the absence of the integrated terminology database; 2) the need to classify the fundamental principles of organizing AAMS for organizations. In this regard, we have developed recommendations for the development of terminology in order to ensure its integrity, offered a system of principles of introducing the AAMS within organizations and compiled the original classification.

2. Theoretical, Informational and Empirical, and Methodological Grounds of the Research

Theoretical and methodological basis of the research consists of the works of local and foreign researches and leading experts on the methodology of organizing the accounting and analytical systems and the AAMS as well as techniques of accounting, analysis and audit. On the basis of systematic approach, the article has developed and justified the scientific and methodological provisions aimed at improving the theory and practice of formation and use of the AAMS within business entities in order to increase efficiency of decision making. The basis of the research consists of the accounting theory (static, dynamic, organic, evolutionary and adaptive), the strategic concept of accounting, analysis and audit. The study of methodological issues of organizing the AAMS relies on a wide range of views expressed by both Russian and foreign researchers and experts in the field of management, economic sciences and accounting (Giannarakis, 2016; Miholaet *et al.*, 2016; Nechaev and Antipina, 2016; Salimova and Makolov, 2016; Liapis *et al.*, 2013).

The analysis of sources shows that the methodology of the AAMS for organizations has not been described thoroughly enough. There is no unanimity in terms of interpretation of such concepts as "accounting and analytical system", "accounting and analytical support for management of the organization", as well as no common approach to the principles of their organizations. Basic approaches to defining of the conceptual apparatus in the AAMS are presented in Table 1.

Table 1. Basic approaches to defining of the conceptual apparatus in the AAMS¹

The interpretation of the concept	Researcher
Accounting and analytical system	
...the accounting and analytical system consists of four interrelated subsystems: record keeping, analysis and audit. The essential basis is the accounting subsystem, as the information used for analysis and control is gathered within it. The accounting subsystem provides constant formation, accumulation, classification and compilation of the necessary information.	L.V. Popova, I.A. Maslova, B.G. Maslov, N.A. Tychinina, L.V. Usatova, Vakhrushina M.A., Nikulin L.N., Yevstafieva Y.M.
Accounting and analytical management support	
...the accounting and analytical management support is a process of collecting, processing, analyzing and transmitting of financial and non-financial information about the state of objects of management and the environment, formed within record keeping and analytical systems of organizations, as well as a set of methods and economic analysis techniques used for verification of bookkeeping (financial) accounts, and at the same time for generation of the information used by managers for managerial decision-making, planning, monitoring of the activities of departments entrusted to them, measurement and evaluation of the results.	Alekseeva I.V., Udalova Z.V., Bogataya I.N., Yevstafieva E.M., N.N. Khakhonova, Y.V. Kuznetsova.

The view of the accounting and analytical systems as a certain integrity, allowing to carry out accounting management of economic processes, as reflected in studies by Kuznetsova Y.V. and Katerinin S.P., involves the use of a structured plan of financial accounts, definition of economic management facilities and the use of accounting techniques as well as building up the results.

The definitions given set the purpose and procedures of the record keeping and analytical system and disclose its contents and role in the enterprise management system. However, the above confirms the lack of mutual understanding of the terms "accounting and analytical system" and "accounting and analytical support" and the need for further reflection and definition. In foreign practice the term "info" has become widespread. The sources review has shown the confusion between such concepts as "accounting and analytical system" and "accounting and analytical support for management of the organization", which calls for a clear delineation between them in order to ensure the unanimity of the terminology database. An attempt to resolve contradictions in this area dictates the need for additional research from the

¹ Developed by the authors.

standpoint of systemic approach as a basic principle of researching socio-economic phenomena and processes.

3. Results

The purpose of the study is to develop a methodology of formation of the AAMS for organizations in the context of harmonization of the global economy. We have clarified the conceptual and categorical apparatus in this field on the basis of our review of contemporary economists' opinions and the clear distinction between the terms "accounting and analytical system" and "accounting and analytical management support", drawn by us. We maintain that the accounting and analytical management system for organizations includes the following interacting subsystems: a) the accounting subsystem (combination of various types of accounting: financial accounting, management accounting, tax accounting, social accounting, environmental accounting, strategic and other accounting types, which are developing within the framework of logical convergence of accounting and economic approaches); b) analytical subsystem (financial analysis, management analysis (controlling), tax analysis, social analysis, strategic analysis, etc.); c) control subsystem (a system of internal company control, internal and external audits); which, based on the implementation of the essential management functions, using methods and accounting techniques, analysis and control carry on the processing, systematization, analysis and monitoring of socio-economic information and of various types of accounting data, taking into account their specific entities with different architectonics of the accounting system within organization. In this way the AAMS is the result, the outcome of the functioning of accounting and analytical system within the organization.

This thesis leads to an important conclusion: improving the organization of the AAMS is impossible without improving the methodology and techniques used in the framework of accounting and analytical systems, designed on the basis of the key theories and concepts of accounting, analysis and control.

The main objective of the AAMS is creating the ground for effective decision-making in administrative management. The structure of the accounting and analytical system determines the configuration of the AAMS and types of information used. The accounting and analytical system of a commercial organization ensures the implementation of the basic management functions in order to make rational managing decisions. Drawing 1 shows the enlarged model of the interaction of the accounting and analytical system and the AAMS of an organization. The basic foundation of accounting and analytical system is the accounting subsystem, as the information used for analysis and control is compiled and processed within it. Accounting support includes: statutory and regulatory information, data from different types of accounts (administrative, social, predictive, strategic, environmental, etc.), as well as non-registered information.

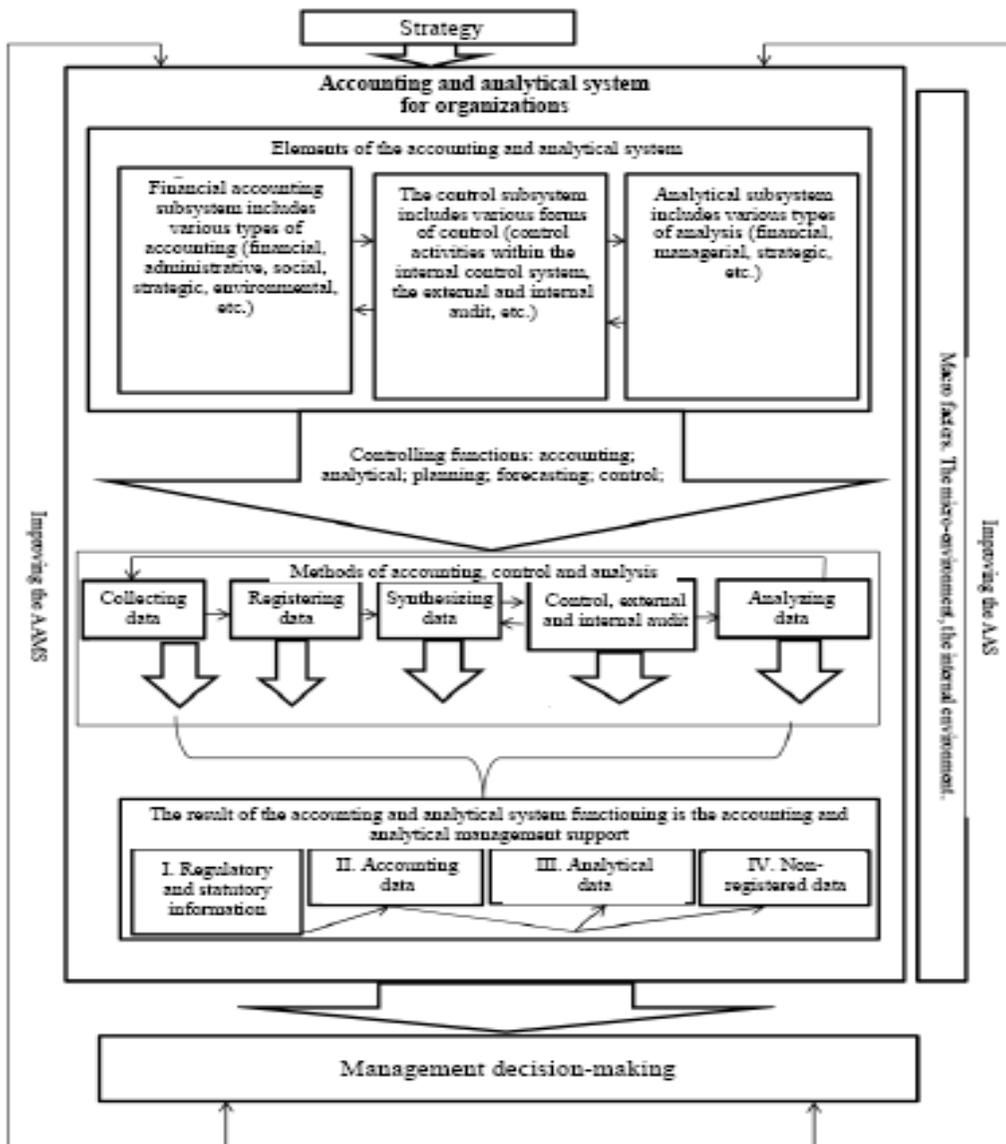


Figure 1. Model of the interaction between the accounting and analytical system and the accounting and analytical management support of the organization¹

The expansion of economic processes requires constant development of record keeping and accounting support for management and involves improving accounting methodology, which is inextricably linked with the process of accounting evolution. Setting up a financial accounting system allows proceeding with the integration processes. This makes it possible, firstly, to integrate managerial, strategic, tax and oth-

¹Developed by the authors.

er types of accounting into the single financial accounting type, and, secondly, to give the national economies a chance to participate in general economic processes, which promotes the harmonization of the global economy.

Registered and non-registered information is the basis for the analytical procedures which result in generating the analytical information. Analysis, as one of the management functions, includes assessment of internal and external factors of the current situation, general trends in the development of economic processes, possible provisions to increase production efficiency. Organizing a continuous analysis leads to increasing its operational efficiency and effectiveness, as the analysis immediately follows record making and allows to the efficiency of the business entity.

One more component of the registration and analytical system is the audit subsystem, which uses both the recorded data and analysis. The accounting information is generated with the help of monitoring activities implemented in the framework of internal control system, which makes it possible to ensure that the information given corresponds to the current legislation, accounts are accurate, and the organization acts efficiently. Within large organizations the internal audit service plays an important role in achieving these objectives. In some cases the accounting and other records may be subject to both mandatory and voluntary audit.

Analytical and control subsystems of accounting and analytical systems have a special role in the processing of accounting information in order to assess its completeness, reliability, good timing and further to analyze it to identify bottlenecks, as well as hidden reserves. Organic unity and interaction of all components of the subsystems of the enterprise record keeping and analytical systems allow, on the one hand, to make the necessary tactical decisions in the operational mode, and on the other - to develop and adjust the strategy of the organization in the long term. At the same time it helps to improve both general methodology and methods of record keeping, analysis and monitoring, ensuring the continuity of this process, and its results are used when making management decisions at the enterprise. The increase in the total volume of prospective financial and strategic information should be mentioned as a distinctive feature of the AAMS for Russian business entities. All this requires the development of methodology, techniques of strategic accounting, analysis and audit. All the accounting processes and system elements that determine the quality of the AAMS (methodology, organization, and technology) must be harmoniously integrated into the overall economic information field, which is a system of a higher level. The methodology of the AAMS involves the use of such advanced techniques as accounting engineering. The operation of these techniques is carried out by means of a system of consolidated balance sheets, allowing determining the causes of changes, to manage the main effects of economic processes and, above all, property.

The AAMS is organized in accordance with a number of principles, which make it a very effective tool for financial management. The original classification of the principles of the accounting and analytical support buildup for the organization man-

agement has been compiled. The proposed principles have been categorized according to their functional purpose and fall into: organizational principles, designation principles and principles of efficiency (Table 2).

Table 2. *The recommended system of the essential principles of the formation of the accounting and analytical systems and the AAMS*¹

Principle	Substantial characteristics
<i>Organizational principles</i>	
Integrity	Ensuring the links with other types of accounting.
Systemacity	Conformity to the requirements, related to registering of a broad set of accounting events in all areas of the enterprise activities
Consistency	Ensuring consistency in combining operational, operative and strategic accounting information, their symbiotic relationship and interdependence on the stage of planning and record keeping
Continuity	Generating a methodological basis for the functioning of financial and management accounting
Coherence	Providing interaction of financial and management accounting subsystems with the company's management both horizontally and vertically, as well as synchronization in time
Comparability	Establishing conditions of comparison and juxtaposition of quantitative values for the recorded data according to the corresponding characteristics, units of measurement, frequency and importance of events
Legality	Compliance with applicable laws, internal standards, regulations and procedures of record keeping process
Progressivity	Compliance of the system with advanced foreign and Russian counterparts
Transparency	The record keeping system should contain unified terminology and operate on unified principles (assumptions and requirements) and methods.
Security	It specifies the level of protection of accounting information within the accounting and analytical system and how to access it
Computerization	Organizing workstations and using of modern information technologies within the accounting and analytical system, which creates the basis for the accounting and analytical management support at the enterprise
<i>Mission-oriented principles</i>	
Adaptability	The ability of the system to adapt to the changing strategic and operational objectives of the company, external and internal conditions of its activity, based on monitoring the information needs of the accounting and analytical management support
Regularity	The contents of the accounting and analytical support conforms to the requirements of current legislation and the regulations for record keeping, organizing and conducting analysis and monitoring.

¹ Developed by the authors.

Principle	Substantial characteristics
Flexibility	Monitoring and reacting to changes in internal and external environment through the use of strategic accounting practices of analysis and audit. Compliance of office machinery, computer equipment and software to newest achievements of information technology and communications
Accuracy	Ensuring the specified accuracy
Efficiency	Meeting the requirements for registration of important operational and other types of events, business processes and operations, as well as for carrying out analysis and audit
<i>Effectiveness</i>	
Minimization	Ensuring effective organization and functioning of the system, when the costs of the activities should be minimized, without compromising the tasks performed
Reliability	Performing control requirements
Profitability	Establishing the most efficient and cost-effective organization of the accounting and analytical system, reducing the share of its operational costs in the total expenses of the enterprise
Optimization	Implementing multivariate elaborated schemes for the organization of the record keeping system and choosing the most efficient one for the specific conditions of the accounting and analytical support at the enterprise

Implementing the given system of fundamental principles of creating the AAMS within the framework of accounting and analytical system will make it possible to generate various kinds of information on the ground of evidence-based methods, the application of which depends on the level of management in the organization, production volume, functional profile of recorded events, use of organizational and technical means in the accounting process, requirements of an integrated automated information system for the recorded information.

4. Conclusions and recommendations

The proposed concept of interaction between the accounting and analytical support and the AAMS provides record keeping, analysis, monitoring and control not only for internal business operations in the context of business processes, but also for the external macro-parameters. The system should take into consideration both direct and reverse associations allowing adapting the information to the changing requirements of internal and external users of information. The differentiation of the concepts of "accounting and analytical system" and "accounting and analytical management support" helped to establish the interaction between them and to determine the methodological basis for their improvement. The distinctive features and advantages of the original interpretation of the category "accounting and analytical system of the organization" are its integrity; scalability; controllability; adaptability; applicability (enabling to realize the functions, inherent for every system); validity; reactivity; security etc. Using the given system to create the AAMS for organizations helps to: obtain more rational ways of solving management problems through introduction of mathematical methods and intelligent systems, etc. ; to liberate employees

from routine work due to automation; to ensure the reliability of information; to improve the structure of information flow and document management system in the company; to reduce the costs etc.

This thesis leads to an important conclusion: improving the organization of the AAMS is impossible without improving the methodology and techniques used in the framework of accounting and analytical systems, designed on the basis of the key theories and concepts of accounting, analysis and control. The given model of the relationship between the accounting and analytical management system and the AAMS helps to functionally transform the results, obtained in the various subsystems of accounting, analysis and audit into information flows of various types (legal, accounting, analytical and non-registered). The ways to this transformation are the methodology of accounting, analysis and audit, aimed at gathering, recording, compiling and analyzing of information and the control over it. The theoretical basis for this transformation is provided by the fundamental principles of building up accounting systems (organization, purpose, effectiveness). The interaction of the theoretical principles and practical techniques contributes to effective management decisions made on the basis of external, internal, specific and macro factors, as well as to external interface, which is particularly important in the context of harmonization of economic processes. The AAMS, operating continuously, improves quality and expands the sphere of practical application of accounting information, causing a positive effect on the quality of prepared and submitted reports and accountable figures themselves, i.e. improves the efficiency of the accountable information for the users.

References

- Alekseeva, I.V. 2002. Accounting and Analytical Support for Strategic Decision-making in the Work of Industrial Enterprises. Diss. synopsis. Rostov-on-Don, 24 p.
- Bernstein, L.A. 2002. Financial Statement Analysis: Theory, Practice and Interpretation. Trans. from Eng., Ed. by Y.V.Sokolov, Moscow, Finance and Statistics, 624 p.
- Bogataya, I.N. 2001. Strategic Account of Property. Monograph. Rostov-on-Don: Phoenix, 320 p.
- Bogataya, I.N. 2012. Types of Reporting as Part of the Accounting and Analytical Support of Money Management and Basic Ways of their Improvement. Audit and Financial Analysis, Iss. 2. P. 19-32.
- Borisov, A.B. 2003. Dictionary of Economics. M.: Knizhny Mir, 895 p.
- Developing Countries in the World Trading System. 2002. The Uruguay Round and Beyond. Edward Elgar Publishing, 223 p.
- Giannarakis, G. 2016. The Challenges of Corporate Social Responsibility Assessment Methodologies. International Journal of Economics and Business Administration, 4(1), 39-55.
- Helfert, E. 2003. Financial Analysis Technique. 10th ed. – SPb, Piter, 640 p.
- Hendriksen, E.S., Van Breda M.F. 1997. Accounting Theory. Moscow: Finance and Statistics, 576 p.
- Horngren, C.T., Foster J. 1995. Accounting: Administrative Aspect. Trans. from English Ed. by Y.V. Sokolov, Moscow, Finance and Statistics, 416 p.
- Hawawini, G., Viallet, C. 2002. Finance for Executives: Managing for Value Creation. Thomson Learning.

- Johnson, H.T., Kaplan, R.S. 1987. *Relevance lost: The Rise and Fall of Management Accounting*, Boston: Harvard Business School Press, 64 p.
- Kaplan, S.R., Norton, P.D. 2003. *Balanced Scorecard. From strategy to action*. 2nd ed., Transl. from English. Moscow: ZAO Olimp-biznes, 320 p.
- Katerinin, S.P. 2016. *Theoretical and Practical Implications for Organizing of Accounting and Analytical Management in Innovative Activity*. Science & World, Iss.1. URL: <http://www.w-science.com/2016-1-355.html>
- Khakhonova, N. 2014. *The conception of formation of accounting analytical support of business entities management in Russia*, CD-ROM, B&M Publishing, San Francisco, California, USA, 149 p. - PQN 500.
- Khakhonova, N.N. 2009. *Methodological Aspects of Organizing the Accounting and Analytical Support for Management of Financial Flows at Commercial Organizations*. Team of authors: Khakhonova, N.N., Bogataya, I.N., Yevstafieva, Y.M., Alekseeva, I.V., Kurnosova, N.I., Zenkina, I.V. AzovPechat.
- Khakhonova, N.N. 2013. *Methodological Aspects of Organizing the Accounting and Analytical Support for Cash Flow Management*. N.N. Khakhonova, S.A. Ukolova, Rostov-on-Don: Publishing House of the RSUE (RINH), AzovPechat, 220 p.
- Khut W. 1958. *The Riddle of foreign Exchanges*. In: Erik Lindahl Selected Papers on Economic Theory. Cambridge.
- Kolass, B. 1997. *Financial Management of the Enterprise. Problems, Concepts and Methods: a manual*. Trans. from Fr.; Ed. by Y.V. Sokolov. -Moscow: Finance, UNITY, 576 p.
- Kuznetsova, Y.V. 2010. *Accounting Charts, Accounting Management of Economic Processes*. Monograph, Rostov-on-Don: Publishing House of SFedU, p. 264.
- Liapis, K., Rovolis, A., Galanos, C. and Thalassinou, I.E. 2013. *The Clusters of Economic Similarities between EU Countries: A View Under Recent Financial and Debt Crisis*. European Research Studies Journal, 16(1), 41-66.
- Mihola, J., Kotěšovcová, J., Wawrosz, P. 2016. *Intensity and Extensity of Firm Development and Dynamic Dupont Analysis*. European Research Studies Journal, 19(4), 53-63.
- Nechaev, A., Antipina, O. 2016. *Analysis of the Impact of Taxation of Business Entities on the Innovative Development of the Country*. European Research Studies Journal, 19(1), 71-83.
- Nikulian, L.N. 2002. *Organizing the Accounting and Analytical System of Obligations at Industrial Enterprises*. Thesis synopsis. Oryol, 24 p.
- Nobes, C.W. and Parker R.H. 1985. *Comparative International Accounting*. Oxford: Philip Allan.
- Popova, L.V., Maslov B.G., Maslova, I.A. 2003. *The Essential Theoretical Principles of Accounting and Analytical Systems*. Financial Management, Iss.5, pp.20–32.
- Salimova, A.T., Makolov, I.V. 2016. *Unused Potential of Quality Management Systems of the Russian Companies: an Empirical Study*. European Research Studies Journal, 19(3) Part A, 150-166.
- Vakhrushina, M.A. 2007. *Accounting Management: a textbook*. Moscow: Omega, p. 245
- Udalova, Z.V. 2011. *Organizing Accounting and Analytical Management Support at Agricultural Organizations: Theory and Methodology*. Thesis Synopsis. Rostov-on-Don.